



## PLANT HARDINESS ZONE 7 DATASET

## **COVER CROP DESCRIPTION**

Most commonly-grown cover crop in the US. Most winter-hardy cover crop. Best winter cover for low-fertility or acid soils. Tolerates wet soil. Winter cereal rye requires vernalization (overwintering) to flower and will likely fail to flower if planted in spring. Best winter cover 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 the growth of a following non-legume cash crop. Potential weed if it sets seed, especially in small grain cash crops. Mixes well with legumes. Can plant later than any small grain, but goes to head early in spring – only barley is earlier.





Cereal Rye, Winter - Ackroyd [2020] Cereal Rye, Winter - Bjorkman [2020] Cereal Rye, Winter - Ackroyd [2020]



## **GOALS**

**Growing Window** Long Nitrogen Scavenging Lasting Residue Prevent Fall Soil Erosion Prevent Spring Soil Erosion Forage Harvest Value

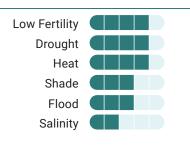
Penetrates Plow Pan **Reduces Surface Compaction** Improve Soil Organic Matter Increase Soil Aggregation **Good Grazing** Pollinator Food



## **WEEDS**

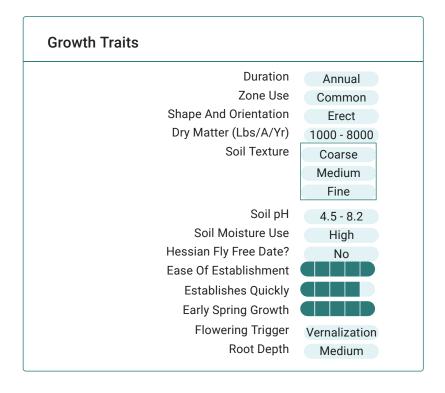
Residue Suppresses Summer Annual Weeds **Outcompetes Summer Annual Weeds** Suppresses Winter Annual Weeds Persistence Volunteer Establishment

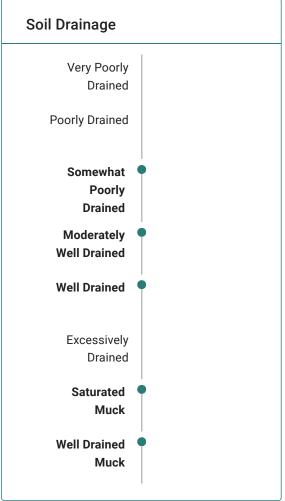
## **ENVIRONMENTAL TOLERANCES**

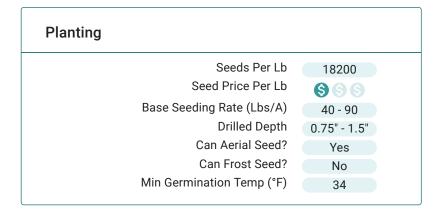


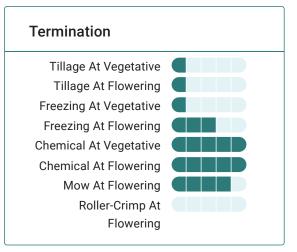


# PLANT HARDINESS ZONE 7 DATASET









Secale cereale

## PLANT HARDINESS ZONE 7 DATASET



## **Extended Comments**

Growth, Roots, and Nutrients: Deep rooting to recover nitrogen requires earlier planting than plantings for winter erosion protection

Planting: If you are planning to use as a killed cover crop mulch for following crop you need to seed at higher rate - up to 150 lbs/acre

Insects: Used as an interplanted dying mulch can reduce CPB colonization in eggplant and enhance the ratio of generalist predators to CPB prey

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

Forage and Grazing: Can be lightly grazed in the fall and again in the spring, or harvested in the spring as ryelage.

Environmental Tolerances: Does very poorly under low-N conditions like most grasses.





## PLANT HARDINESS ZONE 7 DATASET

### 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

Cover Crop Research at the University of Rhode Island, University of Rhode Island Cooperative Extension

Cover Crops and Green Manure Crops - Benefits, Selection, and Use, Rutgers Cooperative Research and Extension

**Cover Crops**, University of Massachusetts Extension

Cover Crops and Green Manures (New England Vegetable Management Guide), University of Massachusetts Extension

**Choosing Cover Crops**, University of Massachusetts Extension

Late Season Cover Crops, University of Massachusetts Extension

Plant Cover Crops, University of Maryland Extension

Cover Crops - What a Difference a Few Weeks Makes, Cornell University Cooperative Extension

<u>Spring Management of Overwintering Cover Crops – Don't Wait!</u>, Cornell University Cooperative Extension

Rye, Cornell University Cooperative Extension

Early Spring Seasonal Cover Crops, Cornell University Cooperative Extension

Early Fall Seasonal Cover Crops, Cornell University Cooperative Extension

Fall Seasonal Cover Crops, Cornell University Cooperative Extension

Cover Crops for Conservation Tillage Systems, Penn State Extension

<u>Suppressing Weeds Using Cover Crops in Pennsylvania</u>, Penn State Extension

Plant Cover Crops, USDA NRCS

Cover Crops in Home Gardens Improve Soil and Reduce Erosion, Penn State Extension

This Isn't Your Father's Cereal Rye, Penn State Extension

<u>Planting Green - A New Cover Crop Management Technique</u>, Penn State Extension

Cover Crop Rollers for Northeastern Grain Production, Penn State Extension