

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.





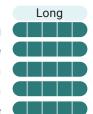


Cereal Rye, Winter - Ackroyd [2020] Cereal Rye, Winter - Bjorkman [2020] Cereal Rye, Winter - Ackroyd [2020]

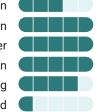


GOALS

Growing Window 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

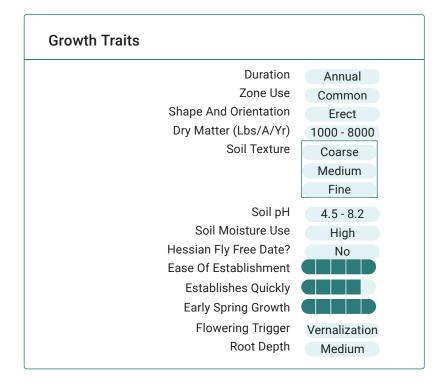


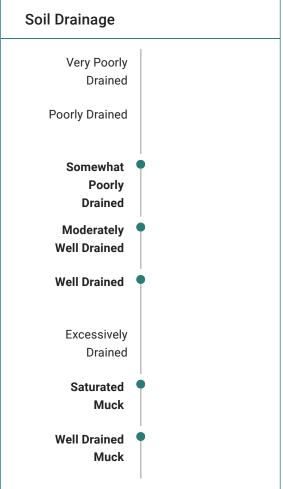
ENVIRONMENTAL TOLERANCES

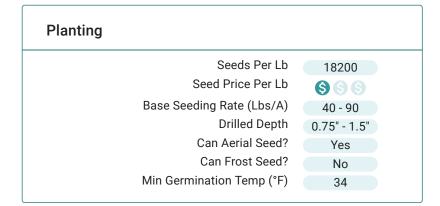
Low Fertility Drought Heat Shade Flood Salinity

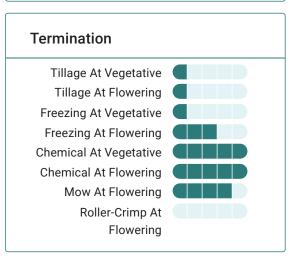


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REPORT OF THE PROPERTY PROPERTY PARTICLE PROPERTY PROPERT



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.



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References & Resources

Multiple Purpose Cover Crops, Northeast Organic Farming Association of Connecticut

Fall Cover Crops, University of Delaware Cooperative Extension

<u>Cover Crops and Green Manure Crops – Benefits, Selection, and Use</u>, Rutgers Cooperative Research and Extension

<u>Early Spring Seasonal Cover Crops</u>, Cornell University Cooperative Extension

<u>Cover Crops for Conservation Tillage Systems</u>, Penn State Extension