Grass
Wheat, Winter
Triticum aestivum

PLANT HARDINESS ZONE 4 DATASET

COVER CROP DESCRIPTION

Common cover crop. Needs vernalization (overwintering) to flower. Not likely to produce seed and will stay shorter if planted in spring. Very good N scavenger. Excellent quality forage. After well-timed grazings can still produce spring biomass or grain. Not for small grain cash crop rotations (host for same diseases and pests). Fine nurse crop for legumes. Mixes well with winter peas, hairy vetch. Shorter, slower to head means residue easier to manage than rye. Planted later in fall, matures later in spring, tolerates wetness better (but not flooding), higher spring biomass potential (but requires high fertility) than barley.


Wheat, Winter - Ackroyd [2020]


Wheat, Winter - Salon [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

Low Fertility	
Drought	
Heat	
Shade	
Flood	
Salinity	

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Growth Traits

Duration	Annual
Zone Use	Common
Shape And Orientation	Erect
Dry Matter (Lbs/A/Yr)	2000 - 5000
Soil Texture	Coarse Fine Medium
Soil pH	5.5 - 8
Soil Moisture Use	
Hessian Fly Free Date?	No
Ease Of Establishment	
Establishes Quickly	
Early Spring Growth	
Flowering Trigger	Vernalization
Root Depth	Medium

Soil Drainage

- Very Poorly Drained
- **Poorly Drained**
- **Somewhat Poorly Drained**
- **Moderately Well Drained**
- **Well Drained**
- **Excessively Drained**
- Saturated Muck
- **Well Drained Muck**

Planting

Seeds Per Lb	
Seed Price Per Lb	$ $
Base Seeding Rate (Lbs/A)	75 - 120
Drilled Depth	0.75" - 1.5"
Can Aerial Seed?	No
Can Frost Seed?	No
Min Germination Temp (°F)	38

Termination

Tillage At Vegetative	
Tillage At Flowering	
Freezing At Vegetative	
Freezing At Flowering	
Chemical At Vegetative	
Chemical At Flowering	
Mow At Flowering	
Roller-Crimp At Flowering	

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Planting and Growth Windows

Frost Seeding	N/A
Reliable Establishment	08/15 - 09/15
Temperature/Moisture Risk	10/01 - 10/07
Active Growth Period	Fall Spring
Winter Survival	Expected
Can Interseed	N/A

Extended Comments

Basic Agronomics: C:N ratio increases at/after boot stage.

Weeds: Absorbs N and H2O heavily during stem growth, so kill before then

Growth, Roots, and Nutrients: Spelt-type varieties are more tolerant of poor seed-soil contact because awns hold moisture.

References & Resources

2015 Cover Crop Mix in Corn Silage Trial, University of Vermont Extension
2014 Summer Cover Crop Mix, University of Vermont Extension
Under Cover – Integrating Cover Crops into Silage Corn Systems, University of Vermont Extension
Pasture Production of Selected Forage Species, University of New Hampshire Cooperative Extension
Spring Management of Overwintering Cover Crops – Don't Wait!, Cornell University Cooperative Extension
Early Fall Seasonal Cover Crops, Cornell University Cooperative Extension