

Grass
Barley, Winter
Hordeum vulgare



PLANT HARDINESS ZONE 7 DATASET

COVER CROP DESCRIPTION

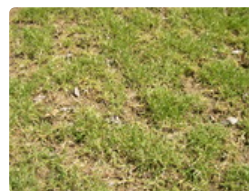
Upright small grain. Widely used in the Northeast. Best small grain for drought, heat, salty, or alkaline soils. Not suitable for wet or acid soils. Winter barley typically needs vernalization (overwintering) to produce stalk/head/seed. May stay short and fail to flower if planted in spring. Quick growth and high biomass if fertility is good. Good weed suppressor, N scavenger, forage producer. Retains feed quality after heading. Good nurse crop for legumes. Use care when including as a cover crop in a small grain rotation (host for same diseases and pests). Bloom timing and height match crimson clover, rapeseed when used in a mix. Planted earlier in fall, matures earlier in spring than wheat. More winter-hardy than oat, less than wheat and rye. Better fall growth and tillers more than wheat and rye but more prone to frost damage.



Barley, Winter - Eagen [2020]



Barley, Winter - Salon [2020]



Barley, Winter - Salon [2020]

GOALS

Growing Window	Medium	Penetrates Plow Pan	<div><div></div><div></div><div></div><div></div><div></div></div>
Nitrogen Scavenging	<div><div></div><div></div><div></div><div></div><div></div></div>	Reduces Surface Compaction	<div><div></div><div></div><div></div><div></div><div></div></div>
Lasting Residue	<div><div></div><div></div><div></div><div></div><div></div></div>	Improve Soil Organic Matter	<div><div></div><div></div><div></div><div></div><div></div></div>
Prevent Fall Soil Erosion	<div><div></div><div></div><div></div><div></div><div></div></div>	Increase Soil Aggregation	<div><div></div><div></div><div></div><div></div><div></div></div>
Prevent Spring Soil Erosion	<div><div></div><div></div><div></div><div></div><div></div></div>	Good Grazing	<div><div></div><div></div><div></div><div></div><div></div></div>
Forage Harvest Value	<div><div></div><div></div><div></div><div></div><div></div></div>	Pollinator Food	<div><div></div><div></div><div></div><div></div><div></div></div>

WEEDS

Residue Suppresses Summer Annual Weeds	<div><div></div><div></div><div></div><div></div><div></div></div>
Outcompetes Summer Annual Weeds	<div><div></div><div></div><div></div><div></div><div></div></div>
Suppresses Winter Annual Weeds	<div><div></div><div></div><div></div><div></div><div></div></div>
Persistence	<div><div></div><div></div><div></div><div></div><div></div></div>
Volunteer Establishment	<div><div></div><div></div><div></div><div></div><div></div></div>

ENVIRONMENTAL TOLERANCES

Low Fertility	<div><div></div><div></div><div></div><div></div><div></div></div>
Drought	<div><div></div><div></div><div></div><div></div><div></div></div>
Heat	<div><div></div><div></div><div></div><div></div><div></div></div>
Shade	<div><div></div><div></div><div></div><div></div><div></div></div>
Flood	<div><div></div><div></div><div></div><div></div><div></div></div>
Salinity	<div><div></div><div></div><div></div><div></div><div></div></div>

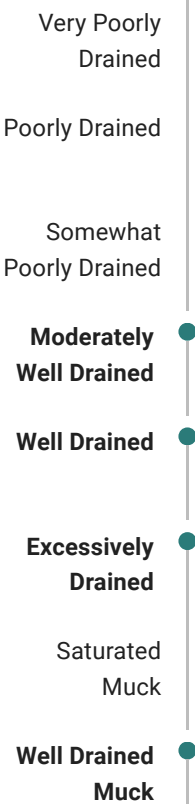


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Growth Traits

Duration	Annual
Zone Use	Common
Shape And Orientation	Erect
Dry Matter (Lbs/A/Yr)	2000 - 5000
Soil Texture	Medium
	Coarse
	Fine
Soil pH	6 - 8.5
Soil Moisture Use	Medium
Hessian Fly Free Date?	No
Ease Of Establishment	
Establishes Quickly	
Early Spring Growth	
Flowering Trigger	Vernalization
Root Depth	Medium

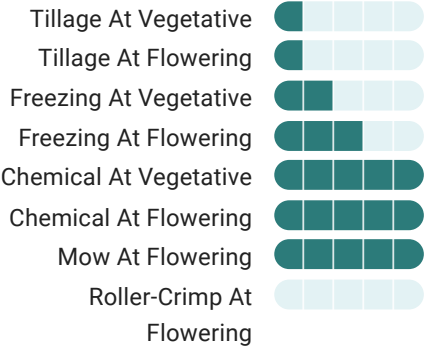
Soil Drainage



Planting

Seeds Per Lb	13600
Seed Price Per Lb	\$ \$ \$
Base Seeding Rate (Lbs/A)	60 - 100
Drilled Depth	0.75" - 1.5"
Can Aerial Seed?	Yes
Can Frost Seed?	No
Min Germination Temp (°F)	38

Termination





PLANT HARDINESS ZONE 7 DATASET

Planting and Growth Windows

Frost Seeding

Reliable Establishment

Temperature/Moisture Risk

Active Growth Period

Winter Survival

Can Interseed

N/A

02/15 - 03/31
09/21 - 10/31

11/01 - 11/15

Fall
Spring

Expected

N/A

JanFebMarAprMayJunJulAugSepOctNovDec

Extended Comments

Forage and Grazing: Failure to overwinter reliably in USDA hardiness zones 5 and colder means biomass production may be low, which potentially limits grazing/forage harvest value.

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

References & Resources

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

Fall Cover Crops, University of Delaware Cooperative Extension

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

Plant Cover Crops, University of Maryland Extension