

PLANT HARDINESS ZONE 4 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. 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. 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]

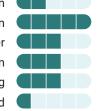
Barley, Winter - Salon [2020]

Growing Window Medium 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

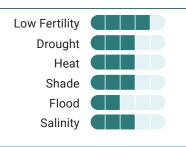
GOALS

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

Volunteer Establishment



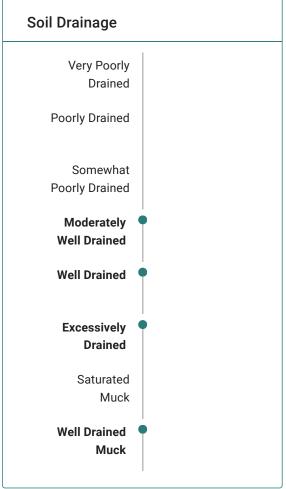
ENVIRONMENTAL TOLERANCES

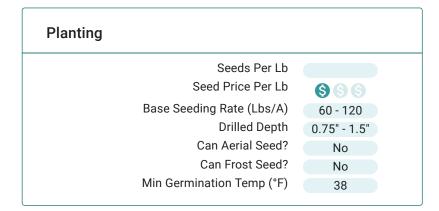


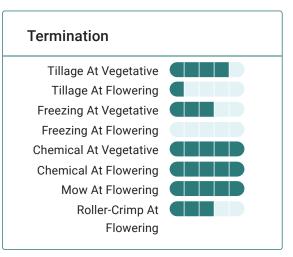


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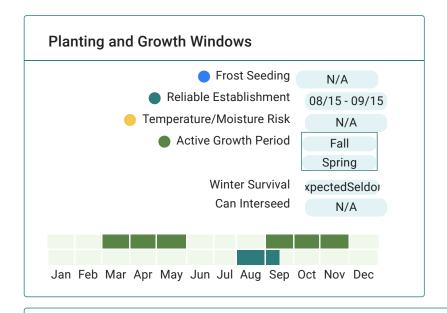








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Extended Comments

Basic Agronomics: Use barley like you would oats, typically winter-kills.

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.

Insects: Terminating barley early or late showed no impact on arthropod (pest or beneficial) numbers in a subsequent soybean crop

References & Resources

<u>Under Cover – Integrating Cover Crops into Silage Corn Systems</u>, University of Vermont Extension Pasture Production of Selected Forage Species, University of New Hampshire Cooperative Extension