

COVER CROP DESCRIPTION

Also known as Daikon or tillage radish. Excellent fall-planted choice if winter-kill is desired. Fastest-growing fall cover crop option if good fertility is present. Good for suppressing weeds. Winter-killed residues decompose and release N rapidly. May overwinter if snow cover is present to buffer temperature extremes. Plant early and plant at the low end of the recommended seeding rate for large plants that are more likely to winter-kill. Late planting and high seeding rates promote small plants that are more winter hardy but cover crop benefits will be greatly diminished. Acts differently when planted in spring: much less root and top growth, bolts and flowers very quickly. Some varieties may differ in sensitivity to daylength and thus may be slower to bolt in spring. Terminate prior to seed set to prevent it from becoming a weed. If it survives winter, it can be difficult to terminate. Good in mixes to add diversity, especially with peas and oats, but plant at the low end of the recommended seeding rate range to prevent it from out-competing companions. Plant in mix with a winter-hardy grass such as cereal rye if N leaching over winter/early spring is a concern. Has vigorous top growth and a thicker root than oilseed radish, is slower to bolt when planted in the fall. Unpleasant sulfur-smelling odor can be released as plants decay.







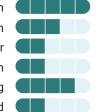
Radish, Forage - Weil [2020] Radish, Forage - Weil [2020]



GOALS

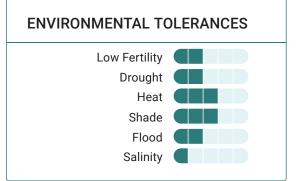
Growing Window Medium Nitrogen Scavenging Lasting Residue Prevent Fall Soil Erosion Prevent Spring Soil Erosion Forage Harvest Value

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

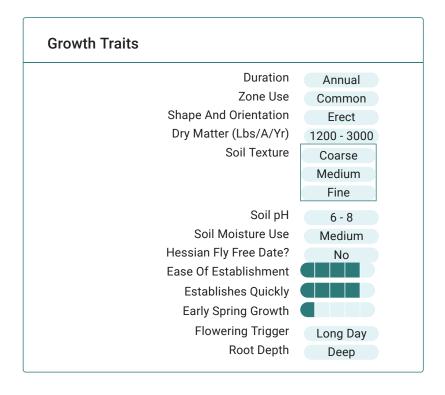


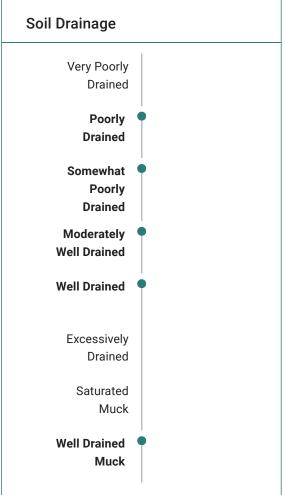
WEEDS

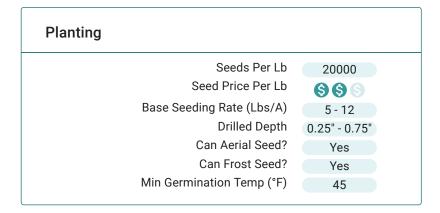
Residue Suppresses Summer Annual Weeds **Outcompetes Summer Annual Weeds** Suppresses Winter Annual Weeds Persistence Volunteer Establishment

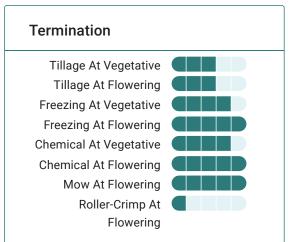


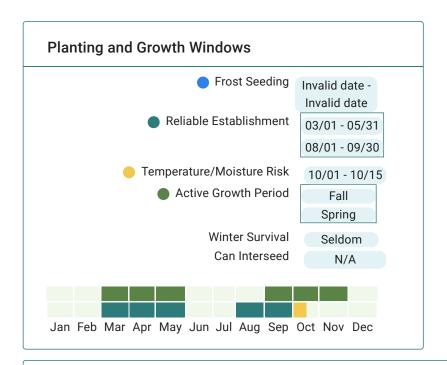












Extended Comments

Planting: Frost seeding may not be advisable in coastal areas.

Termination: More likely to survive if frost occurs prior to formation of storage root.

Forage and Grazing: Used in grazing mixes, season extension for grazing into the fall/early winter. Can be included in summer annual grazing mixes. Bloat risk and other animal health risks associated with brassicas.

Goals: Brassicas are excellent N scavengers but will winter-kill and release N potentially long before a cash crop is present. If N scavenging is goal, plant in mix with species that overwinters.

Pollinators: Attracts earthworms.

Nematodes: Supports reproduction of some root-knot nematode species/races.

Insects: Highly attractive to flea beetles, which can become a problem in other brassica vegetable crops (e.g., broccoli) and eggplant.





References & Resources

Multiple Purpose Cover Crops, Northeast Organic Farming Association of Connecticut

Fall Cover Crops, University of Delaware Cooperative Extension

Spring Planted Cover Crops for Vegetable Rotations, University of Delaware Cooperative Extension

UNH Researchers Find Forage Radish is the Cream of Cover Crops, University of New Hampshire Ag Experiment Station

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

Choosing Cover Crops, University of Massachusetts Extension

Cover Crops, Brassicas, University of Massachusetts Extension

Cover Crops, University of Maryland Extension

Plant Cover Crops, University of Maryland Extension

Forage Radish - New Multi-Purpose Cover Crop for the Mid-Atlantic, University of Maryland Extension

Cover Cropping for Success, University of Maine Cooperative Extension

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

Early Spring Seasonal Cover Crops, Cornell University Cooperative Extension

Late Summer Crucifers, Cornell University Cooperative Extension

Cover Crops for Conservation Tillage Systems, Penn State Extension

Suppressing Weeds Using Cover Crops in Pennsylvania, Penn State Extension

Plant Cover Crops, USDA NRCS