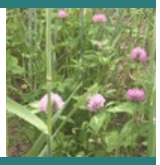
Legume

Clover, Red

Trifolium pratense



PLANT HARDINESS ZONE 6 DATASET

COVER CROP DESCRIPTION

Short-lived upright perennial, often lasts two years. Often grown for hay. Best on good soils with high fertility; tolerates some wetness. Establishes readily, including when frost-seeded, shade tolerant, very winter-hardy, inexpensive. Resists some problem nematodes, good taproot. Moderate to excellent N fixation depending on planting timing. Excellent forage, blooms for pollinators. For fall-seeding, use multi-cut medium or one-cut mammoth varieties. Multi-cut “medium” types best for spring planting. Avoid seed set by harvesting regularly at 1/4 - 1/3 bloom. Mix with grasses like orchardgrass or fescue to moderate C:N ratio at termination. Consider seeding with spring oat nurse crop at low rate in fall or small grain that will be harvested/mowed to “release” clover understory. Inoculate with appropriate Rhizobium spp.; cross inoculates with crimson or white clover. Slower growing, must be seeded earlier and killed later than other fall-seeded legumes.

Clover, Red - Ackroyd [2020]

Clover, Red - 2020 [NaN]

Clover, Red - Salon [2020]

Clover, Red - Salon [2020]

GOALS

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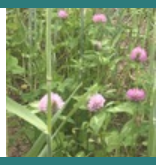

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Growth Traits

Duration	Short-lived Perennial
Zone Use	Common
Shape And Orientation	Erect
Dry Matter (Lbs/A/Yr)	2000 - 5000
Soil Texture	Coarse, Fine, Medium
Soil pH	6 - 7.2
Soil Moisture Use	Low
Hessian Fly Free Date?	No
Nitrogen Accumulation (Lbs/A/Yr)	70 - 150
Ease Of Establishment	■■■□□
Establishes Quickly	■■■■□
Early Spring Growth	■■■■□
Flowering Trigger	Vernalization
Root Depth	Deep
Inoculant Type	Red Clover, White Clover

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	272200
Seed Price Per Lb	$$$
Base Seeding Rate (Lbs/A)	8 - 10
Drilled Depth	0.25" - 0.5"
Can Aerial Seed?	No
Can Frost Seed?	Yes

Termination

Tillage At Vegetative	■□□□□
Tillage At Flowering	■□□□□
Freezing At Vegetative	■□□□□
Freezing At Flowering	■□□□□
Chemical At Vegetative	■■■□□
Chemical At Flowering	■■■■■
Mow At Flowering	■■■□□

Min Germination Temp (°F)

Roller-Crimp At Flowering

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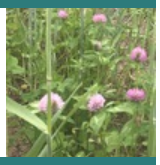
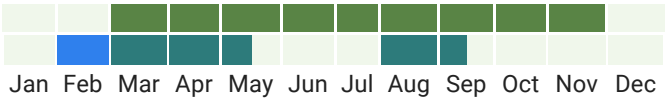


PLANT HARDINESS ZONE 6 DATASET

Planting and Growth Windows

Frost Seeding	02/01 - 03/15
Reliable Establishment	03/15 - 05/15 08/01 - 09/15
Temperature/Moisture Risk	N/A
Active Growth Period	Spring Summer Fall
Winter Survival	Expected
Can Interseed	N/A



Extended Comments

Planting: Can be frost seeded into wheat and other winter annual small grains. Can be included in mixes with other winter annuals but the seed should be separated and put in the small seed box. Organic Farmers have used this for years throughout the Northeast to spin on corn at layby time during last cultivation. In conventional farming we have used this planted with the interseeder to interseed into corn at layby time. Frost seeding may not be advisable in coastal areas.

Termination: If using herbicides to terminate use a tank mixture (e.g., glyphosate + dicamba or 2,4-d)

Growth, Roots, and Nutrients: Root is both tap and fibrous. Medium Red Clover seed is a small seed, for successful Red Clover establishment the soil should be firm (packed). Being a small seed, it should not be planted too deep, only up to ¼ inch deep. Most establishment problems have resulted from planting the seed to deep. In mixes, include this in the small box of the drill or adjust the drill accordingly that the seed is not placed too deep.

Forage and Grazing: Manage for bloat when grazing. When the crop is stressed it can produce phytoestrogens, so do not graze breeding/pregnant sheep on Red Clover. Particularly palatable to voles.

Pollinators: Delay termination until at least 30-50% bloom to maximize value to pollinators.

Nematodes: Host for root-knot nematode.

Insects: Reduced stripped cucumber beetle and melon aphid numbers when interplanted with cucumber and resulted in greater number of Orius, Geocoris and lady beetles in interplanted compared to cuke monoculture. Interplanted with bell pepper resulted in lower percentage of European corn borer infested fruit

References & Resources

Planting Flowers for Bees in Connecticut, Connecticut Agricultural Experiment Station
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Fall Cover Crops, University of Delaware Cooperative Extension
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Management of Red Clover as a Cover Crop, Penn State Extension
Using Flowering Cover Crops for Native Pollinating Bee Conservation, Penn State Extension
Special Cover Crop Control Considerations, Penn State Extension