Legume
Clover, Crimson
Trifolium incarnatum

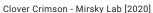## COVER CROP DESCRIPTION

A cool season annual with a short, upright growth habit. Popular in warmer regions of the Northeast. Shade tolerant. Does not reliably overwinter. Good forage producer, good N-fixer. Showy red blooms, good for pollinators. Host to some problem nematodes. Inoculate the seed with appropriate Rhizobium spp.; cross-inoculates with red or white clover. Mixes well with barley, annual ryegrass, cereal rye. Larger seeded and better seedling vigor than most clovers. Earlier-seeded, more fall growth, earlier spring bloom than hairy vetch. Slower residue breakdown of stems and N release than vetch.
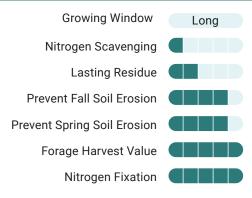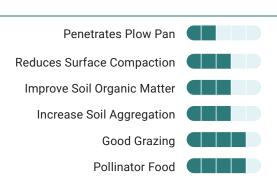

Clover Crimson - Mirsky Lab [2020]
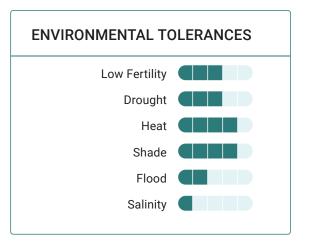

Clover Crimson - Aaron Sande [2020]

Clover Crimson - Bjorkman [2020]

GOALS

Growing Window	Long
Nitrogen Scavenging	1
Lasting Residue	2
Prevent Fall Soil Erosion	3
Prevent Spring Soil Erosion	3
Forage Harvest Value	4
Nitrogen Fixation	4
Penetrates Plow Pan	1
Reduces Surface Compaction	2
Improve Soil Organic Matter	2
Increase Soil Aggregation	2
Good Grazing	3
Pollinator Food	3

WEEDS

Residue Suppresses Summer Annual Weeds	1
Outcompetes Summer Annual Weeds	2
Suppresses Winter Annual Weeds	3
Persistence	1
Volunteer Establishment	4
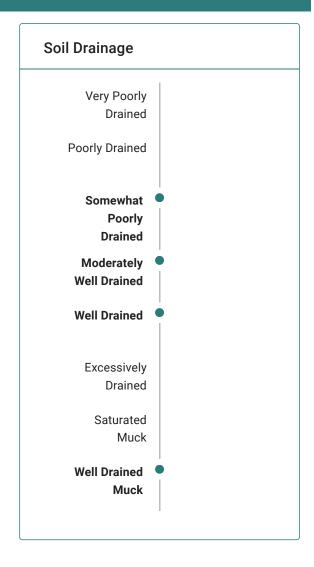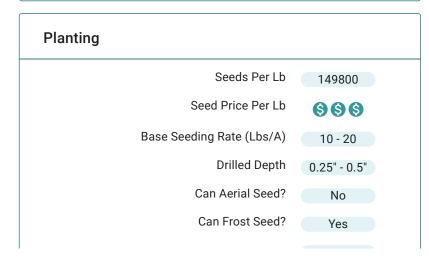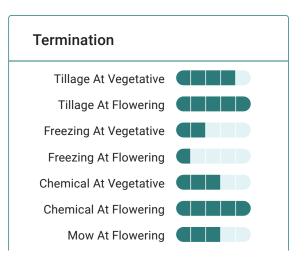
ENVIRONMENTAL TOLERANCES

Low Fertility	3
Drought	2
Heat	4
Shade	3
Flood	1
Salinity	1

Legume
Clover, Crimson
Trifolium incarnatum

Growth Traits

Duration	Annual
Zone Use	Emerging
Shape And Orientation	Erect / Semi-Erect
Dry Matter (Lbs/A/Yr)	3500 - 5500
Soil Texture	Coarse / Fine / Medium
Soil pH	5.5 - 7.2
Soil Moisture Use	Medium
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	Medium
Inoculant Type	Crimson Clover / Berseem 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	149800
Seed Price Per Lb	$ $ $
Base Seeding Rate (Lbs/A)	10 - 20
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)   42

Roller-Crimp At
Flowering

Legume
Clover, Crimson
Trifolium incarnatum

Planting and Growth Windows

🔵 Frost Seeding	02/01 - 03/15
🟢 Reliable Establishment	03/15 - 05/15 08/15 - 09/30
🟡 Temperature/Moisture Risk	N/A
🟢 Active Growth Period	Summer Spring Fall
Winter Survival	Expected
Can Interseed	N/A

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
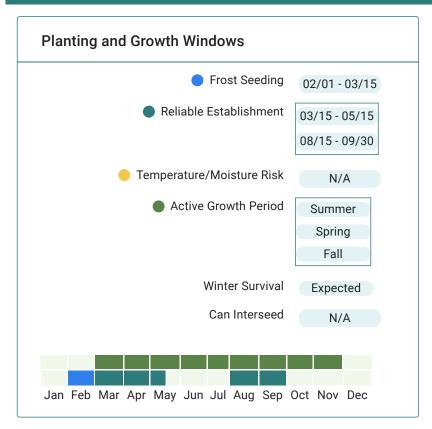
Extended Comments

Planting: Often has problems competing with summer annual weeds during establishment if seeded June-August; interseeding in some systems works because shade from crop canopy reduces weed growth. 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). Freezing during the flowering stage unlikely.

Forage and Grazing: Failure to overwinter reliably in USDA hardiness zone 5 and less may limit utility for grazing and forage harvest unless planted in mid to late summer for winter termination.

Pollinators: Attracts bumblebee queens and honeybees. One of the earliest flowering clovers. Delay termination until at least 30-50% bloom to maximize value to pollinators.

Nematodes: Excellent host for root-knot nematode.

Insects: Used as an interplanted dying mulch can reduce CPB colonization in eggplant and enhance the ratio of generalist predators to CPB prey

References & Resources

Planting Flowers for Bees in Connecticut, Connecticut Agricultural Experiment Station

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

Multiple Purpose Cover Crops, Northeast Organic Farming Association of Connecticut

Fall Cover Crops, University of Delaware Cooperative Extension

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

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

Choosing Cover Crops, University of Massachusetts Extension

Cover Crops, University of Maryland Extension

Plant Cover Crops, University of Maryland Extension

Cover Crops for Home Gardens, University of Maine Cooperative Extension

Using Green Manures, Maine Organic Farmers and Gardeners Association

Selected Green Manures and Cover Crops for Maine, University of Maine

Cover Crops – What a Difference a Few Weeks Makes, Cornell University Cooperative Extension

Cover Crops for Conservation Tillage Systems, Penn State Extension

Using Flowering Cover Crops for Native Pollinating Bee Conservation, Penn State Extension

Special Cover Crop Control Considerations, Penn State Extension