

Legumes

Berseem Clover

AS A COVER CROP IN OHIO

This fact sheet summarizes information specific to Ohio that is available from the Midwest Cover Crops Council. For more information, see the *Midwest Cover Crops Field Guide, Third Edition*, and the Cover Crop Selector Tool found at: midwestcovercrops.org/selector-tool/



Photo credit: Oregon State University

Trifolium alexandrinum

Identification Information

- Narrow leaflets
- Hollow stems
- Cream-colored flowers
- Short taproot

Cultural Traits

- Summer annual
- Minimum germination temperature: 42°F
- Reliable establishment window (state average): June 10–Aug. 16
- Upright growth habit: 16–20 inches
- Preferred soil pH: 6.2–7.0

Heat tolerance: Very good

Drought tolerance: Good

Winter survival: Winter-killed

- Some varieties are more frost tolerant than others but will not survive winter.

Individuals participating in financial assistance programs are required to follow NRCS Appendix A regarding seeding rates and dates. Failure to do so will jeopardize payments. Appendix A can be found in Ohio's Field Office Technical Guide, Section 4, Ecological Sciences Tools: <https://efotg.sc.egov.usda.gov/#/state/OH/documents/section=4&folder=-6>

Planting Information

- Drilled ¼–½ inch
 - 8–15 lbs./acre (pure live seed)
- Broadcast with shallow incorporation
 - 9–17 lbs./acre (pure live seed)
- Broadcast without incorporation
 - 10–18 lbs./acre (pure live seed)

Additional planting information:

- 206,880 seeds/lb.
- Inoculation type: berseem, crimson
- When planting on slopes or using for forage/grazing, increase seeding rate.
- Broadcasting without incorporation is usually less dependable than drilling or broadcasting with incorporation.
- When interseeding, time seeding to match appropriate crop growth/maturity.

Performance

- Dry matter = 1,200–3,000 lbs./acre per year
 - Biomass quantity is highly dependent on planting/termination dates and precipitation.
- Total nitrogen = 70–150 lbs. N/acre (not fertilizer replacement)
 - Nitrogen release can vary considerably depending on stand density and growth, soil temperature, and moisture after clover has been destroyed.



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Termination Information

- Tillage
 - If terminating with only tillage, multiple passes are often required.
- Chemical
- Winterkill

Additional termination information:

- Follow NRCS guidelines for cover crop termination dates for crop insurance compliance.

Performance (continued)

Nitrogen source:	Good
Soil builder:	Very good
Erosion fighter:	Very good
Weed fighter:	Very good
Grazing:	Excellent
Lasting residue:	Good
Mechanical forage harvest:	Excellent

Potential Advantages

SOIL IMPACTS

Subsoiler:	Good
Frees P and K:	Good
Compaction fighter:	Very good
Chokes weeds:	Good

OTHER

Attracts beneficials:	Very good
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Potential Disadvantages

Delayed emergence: Could be a minor problem

Increased weed potential: Occasionally a minor problem

Increased insects/nematodes: Could be a minor problem

Increased crop diseases: Occasionally a minor problem

Establishment challenges: Occasionally a minor problem

Contributors

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(Note: This publication was adapted with consent from MCCC with content from the Midwest Cover Crops Field Guide, Third Edition, and Cover Crop Selector Tool: midwestcovercrops.org/selector-tool/.)

The Midwest Cover Crops Council (www.midwestcovercrops.org) aims to facilitate widespread adoption of cover crops throughout the Midwest by providing educational/outreach resources and programs, conducting new research, and communicating about cover crops to the public.

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