

*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/](http://midwestcovercrops.org/selector-tool/)



*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/](http://midwestcovercrops.org/selector-tool/).)*

The Midwest Cover Crops Council ([www.midwestcovercrops.org](http://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.

Funding for this project was provided by McKnight Foundation.

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