Brassicas

# Rapeseed 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/



# Brassica napus

## **Identification Information**

- Small, yellow, four-petaled flowers on vertical stems
- Narrow leaves at top of plant with larger lobed leaves toward the bottom
- Strong taproot with fibrous lateral roots
- Rapeseed and canola are the same species, but their oils have different chemical makeups; rapeseed has at least 45% erucic acid content, whereas canola has usually less than 2% erucic acid.

#### **Cultural Traits**

- Winter annual
- Minimum germination temperature: 41°F
- Reliable establishment window (state average): July 25–Oct. 19
- Upright growth habit: 3–5 feet
- Preferred soil pH: 5.5-8.0

Heat tolerance:		Good
Drought tolerand	ce:	Good
<b>Shade tolerance:</b>		Good
Low fertility tolerance:		Good
Winter survival:	Varies based on	specific variety

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: <a href="https://efotg.sc.egov.usda.gov/#/state/OH/documents/section=4&folder=-6">https://efotg.sc.egov.usda.gov/#/state/OH/documents/section=4&folder=-6</a>

# **Planting Information**

- Drilled at ¼-½ inch
  - 1–4 lbs./acre (pure live seed)
- Broadcast with shallow incorporation
  - 2–4 lbs./acre (pure live seed)
- Broadcast without incorporation
  - 3–4 lbs./acre (pure live seed)

## Additional planting information:

- 157,000 seeds/lb.
- Do not use glyphosate-resistant varieties.
- 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.

#### Performance

- Dry matter yield = 1,000-2,500 lbs./acre per year
  - Biomass quantity is highly dependent on planting/termination dates and precipitation.

Nitrogen scavenger:	Very good
Soil builder:	Good
<b>Erosion fighter:</b>	Very good
Weed fighter:	Very good
Grazing:	Very good
Quick growth:	Very good
Lasting residue:	Good
Cash crop interseed:	Excellent





#### **Termination Information**

- Tillage
  - If terminating with only tillage, multiple passes are often required.
- Chemical
- Winterkill
  - Winter survival varies based on specific variety and conditions.

## Additional termination information:

- Kill or till-in at least three weeks before planting cash crop.
- There is a moderate weed potential if not completely terminated.
- Follow NRCS guidelines for cover crop termination dates for crop insurance compliance.

## Additional performance information:

- Should not be used in rotations with other brassicas
- May help reduce rhizoctonia in some cropping systems
- May become a serious weed if allowed to go to seed
- Does not tolerate ponding

## **Potential Advantages**

#### SOIL IMPACTS

Subsoiler:	Very good
Compaction fighter:	Very good
Nematodes:	Very good
Disease:	Good
Allelopathic:	Very good
Chokes weeds:	Very good

### **OTHER**

Attracts beneficials:	Very good
<b>Short windows:</b>	Good

## **Potential Disadvantages**

Delayed emergence: Could be a minor problem

Increased weed potential: Could be a moderate problem

Increased insects/nematodes: Could be a minor problem

Hinders crops: Occasionally a minor problem

**Mature incorporation 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/.)

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