

Brassic

Forage Turnip

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: Guillermo Scaglia, LSU Ag Center

Brassica rapa

Identification Information

- Broad leaves with prominent, lighter-colored midribs
- Lower leaves that may have a large central lobe with 1–4 pairs of side lobes
- Smaller, non-lobed upper leaves with a wide base and pointed tip
- Usually hairless leaves that may have a whitish film
- Fleshy, enlarged taproot
- May have yellow flowers clustered at the end of a vertical stem

Cultural Traits

- Cool-season annual
- Minimum germination temperature: 45 °F
- Reliable establishment window (state average): Mar. 29–June 11; July 24–Sept. 6
- Upright growth habit
- Preferred soil pH: 5.3–6.8

Heat tolerance: Good

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

Planting Information

- Drilled at ¼–½ inch
 - 1–3 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:

- 192,800 seeds/lb.
- 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 = 1,200–3,000 lbs./acre per year
 - Biomass quantity is highly dependent on planting/termination dates and precipitation.

Nitrogen scavenger: Good

Soil builder: Good

Weed fighter: Good

Grazing: Excellent

Quick growth: Good

Lasting residue: Good

Mechanical forage harvest: Good

Cash crop interseed: Good



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Termination Information

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

Additional termination information:

- Winter/snow cover conditions may affect winterkill.
- Follow NRCS guidelines for cover crop termination dates for crop insurance compliance.

Additional performance information:

- Generally better forage for grazing than radishes
- Should not comprise more than 35% of livestock diet
- Good for deer plots
- Non-host for soybean cyst nematode
- Erosion concern; plant in a mixture

Potential Advantages

SOIL IMPACTS

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

OTHER

Short windows:	Very good
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Potential Disadvantages

Delayed emergence: Could be a minor problem

Increased weed potential: Could be a minor problem

- Can become a serious weed if allowed to go to seed
- May have hard seed

Increased insects/nematodes: Could be a minor problem

- Host for root-knot nematode, penetrans root lesion nematode, and sugarbeet cyst nematode
- Risk for white mold

Hinders crops: Occasionally a minor problem

Contributors

Rachel Cochran, Ohio State University Extension;
Sarah Noggle, Ohio State University Extension

(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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