

Brassicas

Radish

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/

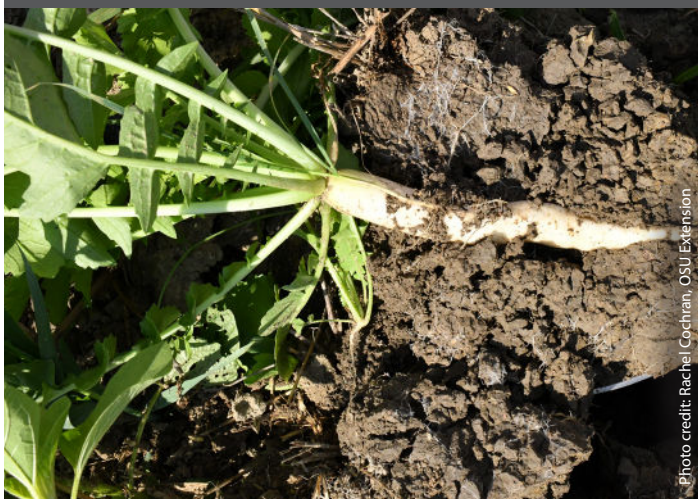


Photo credit: Rachel Cochran, OSU Extension

Raphanus sativus

Identification Information

- Deeply lobed leaves
- Rosette of leaves
- Flowers that are purple, light purple, light pink, or white
- Deep taproot

Cultural Traits

- Cool-season annual
- Minimum germination temperature: 45°F
- Reliable establishment window (state average): Mar. 29–June 11; July 24–Sept. 28
- Upright growth habit: 12–18 inches
- Preferred soil pH: 6.0–7.5

Heat tolerance: Good

Shade tolerance: Good

Winter survival: Seldom

- Snow cover may enhance survival.

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 ¼–¾ inch
 - 2–4 lbs./acre (pure live seed)
- Broadcast with shallow incorporation
 - 3–5 lbs./acre (pure live seed)
- Broadcast without incorporation
 - 3–6 lbs./acre (pure live seed)

Additional planting information:

- 34,000 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: Very good

Soil builder: Good

Weed fighter: Very good

Grazing: Good

Quick growth: Very good

Cash crop interseed: Excellent



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Termination Information

- Tillage
 - If terminating with only tillage, multiple passes are often required.
- Chemical
- Winterkill
 - Winter-kills at 25° F (mild winters may allow for 10% survival of some varieties)

Additional termination information:

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

Additional performance information:

- Radish is excellent for early interseeding.
- It is good at scavenging but will release nutrients before crop growing season.
- Other plants may be smothered if radish is planted too heavy.
- It produces a natural herbicide called glucosinolate, which reduces germination of weeds.
- The grazing palatability of radish improves after frost.
- Radish attracts earthworms.
- Do not plant as a single species due to erosion concern.
- During the process of decay, radish can be odorous.
- Radish can bolt under certain conditions and become a serious weed if allowed to go to seed.

Potential Advantages

SOIL IMPACTS

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

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

Increased insects/nematodes: Occasionally a minor problem

Hinders crops: 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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