

Grasses

Japanese Millet

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/



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Echinochloa spp.

Identification Information

- Thick stems and a coarser appearance than other millets
- Coarse and hairless leaves; 4–20 inches long
- Brown to purple inflorescences

Cultural Traits

- Summer annual
- Minimum germination temperature: 65 °F
- Reliable establishment window (state average): May 20–Sept. 6
- Upright growth habit: 2–4 feet
- Preferred soil pH: 5.5–7.5

Heat tolerance: Excellent

Drought tolerance: Excellent

Low fertility tolerance: Very good

Winter survival: Winter-killed; sensitive to frost

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 ½–¾ inches
 - 12–15 lbs./acre (pure live seed)
- Broadcast with shallow incorporation
 - 14–17 lbs./acre (pure live seed)
- Broadcast without incorporation is not recommended.

Additional planting information:

- 142,900 seeds/lb.
- When planting on slopes or using for forage/grazing, increase seeding rate.

Performance

- Dry matter = 1,500–3,500 lbs./acre per year
 - Biomass quantity is highly dependent on planting/termination dates and precipitation.

Nitrogen scavenger: Very good

Soil builder: Very good

Erosion fighter: Very good

Weed fighter: Very good

Grazing: Excellent

Quick growth: Excellent

Lasting residue: Very good

Mechanical forage harvest: Excellent



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Termination Information

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

Additional termination information:

- Mowing after heading may terminate.
- Japanese millet can produce a lot of seed if allowed to reach maturity.
- Follow NRCS guidelines for cover crop termination dates for crop insurance compliance.

Additional performance information:

- Under certain conditions, nitrate poisoning is possible.
- Cut forage at greater than 6 inches to avoid nitrate toxicity.
- Mid-season cutting increases root penetration.
- Japanese millet tolerates wet soils, flooding, and ponding.
- Japanese millet does not tolerate shade.

Potential Disadvantages

Increased weed potential: Could be a minor problem

Increased insects/nematodes: Occasionally a minor problem

Hinders crops: Occasionally a minor problem

Mature incorporation challenges: Could be a moderate problem

Potential Advantages

SOIL IMPACTS

Frees P and K:	Good
Nematodes:	Good
Disease:	Very good
Allelopathic:	Very good
Chokes weeds:	Excellent

OTHER

Bears traffic:	Very good
Short windows:	Excellent

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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