OHIO COVER CROP FACT SHEET

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**/



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: Low fertility tolerance:		Excellent
		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: <u>https://efotg.sc.egov.usda.gov/#/state/OH/documents/</u> <u>section=4&folder=-6</u>

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







MCCC-FSOH-4



Termination Information

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

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 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

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.

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

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.

Funding for this project was provided by McKnight Foundation.

MCKNIGHT FOUNDATION

December 2022

OHIO COVER CROP FACT SHEET The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age,

disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer. ©2022 by MCCC. All rights reserved.