

JAPANESE MILLET

COVER CROP FACT SHEET FOR IOWA

Japanese Millet (*Echinochloa esculenta*) is a quick growing introduced, annual, warm season grass most used in Iowa as a cover crop for choking weeds, providing supplemental grazing, and scavenging nitrogen.



Identifying Features

- » Coarse, hairless leaves
- » Thicker stem than other millets
- » Coarser appearance than other millets

Cultural Traits

- » Summer annual grass
- » Minimum germination soil temperature: 65° F
- » Cold temperature tolerance: 32° F
- » Seeding date: Early May to Early August*

Planting Information*

- » **Drill** at ½ - 1 inch (12 lbs./acre PLS**)
- » **Broadcast** (14 lbs./acre PLS)
- » **Aerial** (Not recommended)

*Planting information from Midwest Cover Crop Council (midwestcovercrops.org). Refer to local NRCS office recommendations (Iowa Field Office Technical Guide, Section 4, 340 Cover Crop) for seeding dates and rates pertinent to location specific financial assistance program requirements.

**Pure Live Seed

Additional planting information:

- » ~143,000 seeds/lb.
- » Increase seeding rate if using for forage/grazing.
- » Japanese millet grows best in a pure stand.
- » Grows well in somewhat to poorly drained soils.



Japanese Millet Seed



Japanese millet blooming



Japanese millet leaf



New growth of Japanese millet cover crop. (Green Cover)

C:N (Carbon:Nitrogen) Ratio

- » Japanese Millet 42:1

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Japanese millet leaves.



Japanese millet up-close. (Green Cover)

Performance

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

Performance Ratings

» Cash crop interseed (<i>early vegetative</i>)	Poor
» Cash crop overseed (<i>late seed fill</i>)	Poor
» Grazing quality	Very good
» Mechanical forage harvest	Very good
» Nitrogen fixer	N/A
» Nitrogen scavenger	Excellent
» Weed suppression	Very good
» Compaction fighter	Very good
» Erosion control	Very good
» Lasting residue	Very good
» Quick grower	Very good
» Drought tolerance	Good
» Low fertility tolerance	Good
» Shade tolerance	Poor

Additional Considerations

- » Grow to 20 inches before cutting to avoid nitrate toxicity.
- » Reduces penetrans root lesion nematode population densities.

Japanese Millet



Japanese millet field (Green Cover)

This fact sheet is a collaborative effort of USDA's Natural Resources Conservation Service (NRCS) and Iowa State University Extension and Outreach to provide cover crop options and information for Iowa landowners.