

PEARL MILLET

COVER CROP FACT SHEET FOR IOWA

Pearl Millet (*Pennisetum glaucum*) is an upright summer annual bunchgrass, best used in Iowa as part of a cover crop mix. Pearl millet is an excellent nitrogen scavenger and provides quality livestock grazing.



Identifying Features

- » Broad, flat, pointed leaves with serrated edges
- » Long and pointed leaf blades
- » Cattail-like inflorescences

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 (10 lbs./acre PLS**)
- » **Broadcast** (12 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:

- » ~80,000 seeds/lb.
- » Increase seeding rate if using for forage/grazing.
- » Planting in a mixture can enhance performance as a cover crop.
- » Best for well-drained and other light soils.



*Pearl Millet Seed
(Shown with seed treatment)*



Pearl millet sprouting



Pearl millet 2 weeks of growth



Pearl millet field

C:N (Carbon:Nitrogen) Ratio

- » Pearl Millet 50:1

PEARL MILLET COVER CROP FACT SHEET



Cows graze pearl millet.



Pearl millet in a cover crop mix.

Performance

Dry matter = 3,000 - 7,000 lbs./acre per year
(Biomass quantity is dependent on planting and termination dates and precipitation.)

Performance Ratings

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

Additional Considerations

- » Wait to graze until 24-30 inches to reduce risk of nitrate toxicity.
- » Pearl millet is a better forage species than other millets.
- » Tolerant to acidic soils.
- » Does not tolerate shade, flooding, or ponding.
- » Reduces penetrans root lesion nematode population densities.

Pearl Millet



Hybrid pearl millet (Courtesy of G. German)

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.