

# 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](http://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



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*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	Good
» Erosion control	Good
» Lasting residue	Excellent
» Quick grower	Very good
» Drought tolerance	Excellent
» Low fertility tolerance	Good
» Shade tolerance	Good

### 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.