

PROSO MILLET

COVER CROP FACT SHEET FOR IOWA

Proso Millet (*Panicum miliaceum*) is a quick growing, warm season annual grass spreading in popularity as a cover crop used for suppressing weeds, erosion control, and supplemental livestock grazing.



Identifying Features

- » Seedlings look similar to corn
- » Long leaf sheaths with hairs present
- » Short ligules and no auricles on leaves
- » Seed husk remains attached to the roots of seedlings

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.



Proso Millet Seed



Young proso millet



Proso millet at two weeks



Proso millet

C:N (Carbon:Nitrogen) Ratio

- » Proso Millet 40:1

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Proso millet field in Iowa. (Courtesy of Dryland Genetics)



Maturing proso millet. (Courtesy of Dryland Genetics)

Performance

Dry matter = 500 - 4,000 lbs./acre per year
(Biomass quantity is dependent on planting and termination dates and precipitation.)

Performance Ratings

» Cash crop interseed (<i>early vegetative</i>)	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	Very good
» Weed suppression	Very good
» Compaction fighter	Very good
» Erosion control	Very good
» Lasting residue	Very good
» Quick grower	Excellent
» Drought tolerance	Very good
» Low fertility tolerance	Good
» Shade tolerance	Poor

Additional Considerations

- » Proso millet is a prolific seed producer that has developed some herbicide resistance; seed shatters easily.
- » Grows best in full sun; can perform well in many soil types.
- » Can grow farther north than other millets and is adapted to water-limited environments.

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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.