

FOXTAIL MILLET

COVER CROP FACT SHEET FOR IOWA

Foxtail Millet (*Setaria italica*) is a quick growing, drought tolerant annual, warm season grass most commonly used as a cover crop in Iowa to suppress weeds, reduce soil erosion, and provide supplemental livestock feed.



Identifying Features

- » Hairy ligule and round, hollow stem
- » Coarse and leafy stems; more slender than pearl millet
- » Leaves have closed sheaths
- » Seedhead looks like foxtail, but appears in a spiraling pattern

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:

- » ~213,000 seeds/lb.
- » Increase seeding rate if using for forage/grazing.
- » Foxtail millet grows best in a pure stand.
- » Tolerant of cooler and drier climate than other millets.



Foxtail Millet Seed



Foxtail millet leaves



New foxtail millet growth



Foxtail millet ligule

C:N (Carbon:Nitrogen) Ratio

- » Foxtail Millet 44:1

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Foxtail millet field



Foxtail millet leaves (Lidea Seeds)

Performance

Dry matter = 500 - 8,000 lbs./acre per year
(Biomass quantity is dependent on planting and termination dates and precipitation.)

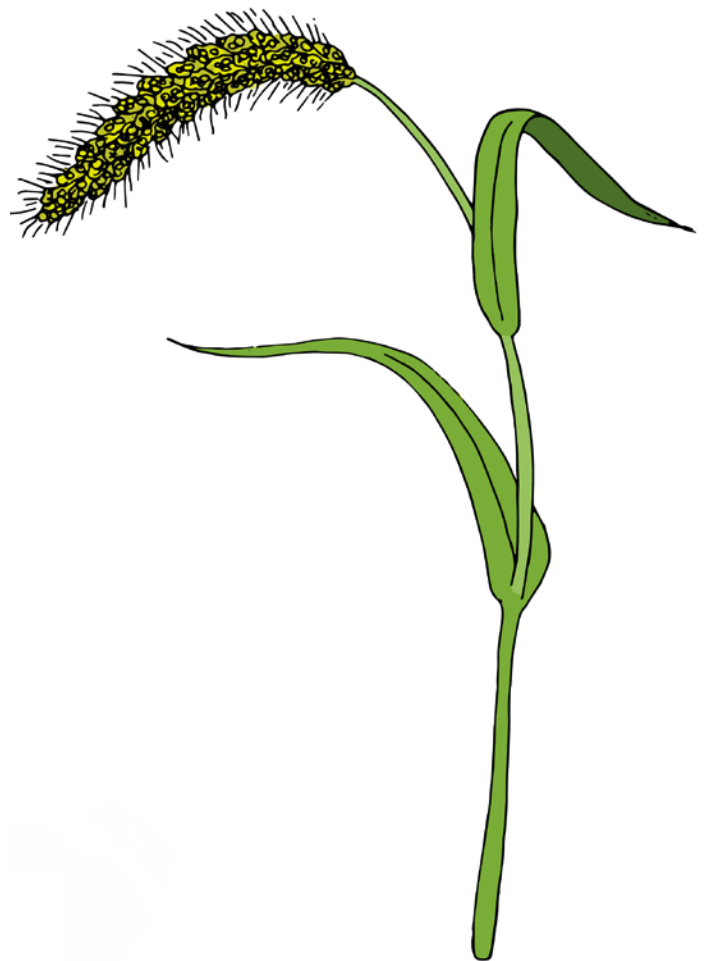
Performance Ratings

» 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

- » Foxtail millet can grow in a variety of soil types, but doesn't grow as well in saturated soils.
- » Minimal regrowth following cutting; similar to proso millet.
- » Shallow root system can result in poor recovery following severe drought conditions.
- » Graze after 18" of height growth and before seed production.

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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.