

FLAX

COVER CROP FACT SHEET FOR IOWA

Flax (*Linum usitatissimum*) is fast growing, cool-season annual broadleaf best used in cover crop mixes. Flax is a good nitrogen scavenger and provides adequate erosion control.



Identifying Features

- » Leaves in whorled arrangement
- » Simple leaves attached to stem
- » Long, thin, unbranched stem

Cultural Traits

- » Cool-season annual broadleaf
- » Minimum germination soil temperature: 48° F
- » Cold temperature tolerance: 26° F
- » Seeding date: Early August to Early September* (F)***
- » Seeding date: Early April to Early May* (S)***

Planting Information

- » **Drill** at ¼ - ¾ inch (15 lbs./acre PLS**)
- » **Broadcast** (18 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

***F=Fall S=Spring

Additional planting information:

- » ~80,000 seeds/lb.
- » Plant in a mixture with other short stature species.
- » Broadcasting without incorporation is usually less dependable than drilling.



Flax Seed



Flax sprouting



Sprouting flax seeds



A field of flax

C:N (Carbon:Nitrogen) Ratio

- » Flax 20:1 to 50:1

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Flax flowers are light purple when they bloom.



Flax in a cover crop mix with oats.

Performance

Dry matter = 200 - 1,500 lbs./acre per year
(Biomass quantity is dependent on planting and termination dates and precipitation.)

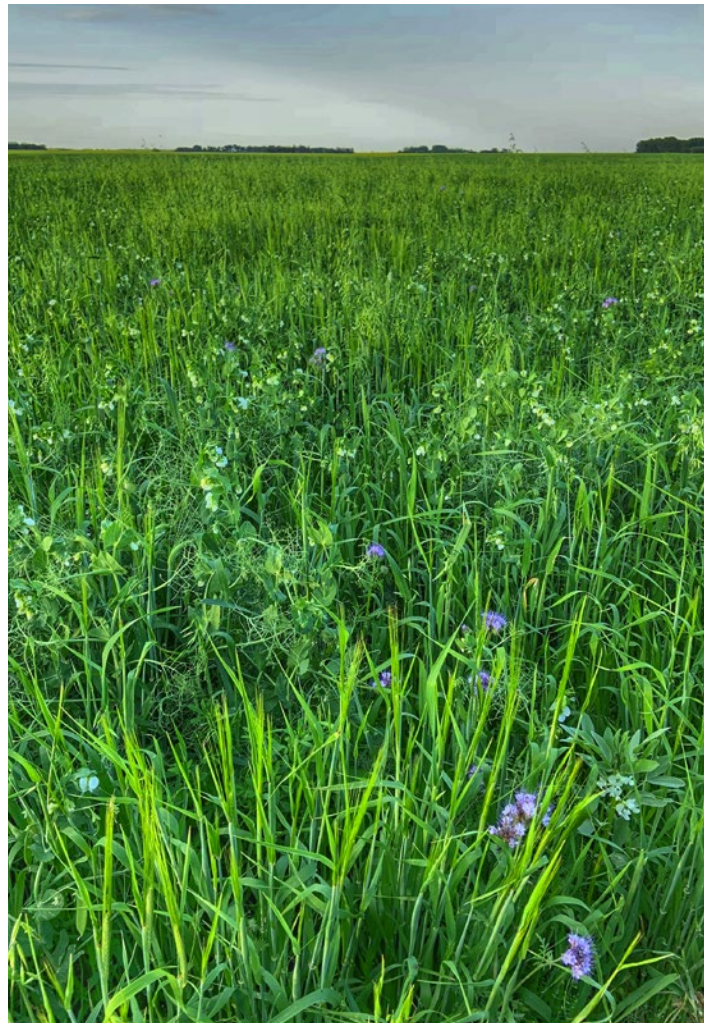
Performance Ratings

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

Additional Considerations

- » Due to potential for prussic acid in flax, use caution if grazing, especially after a freeze or other stress events.
- » Flax is low in palatability for grazing animals.
- » Do not let flax go to seed because it can spread easily.
- » Flax is a host for powdery mildew and rhizoctonia; be aware of a possible green bridge effect when using ahead of soybeans.

Flax In Cover Crop Mix



Purple flax blooms are visible in this multi-species cover crop mix.

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.