

SUNN HEMP

COVER CROP FACT SHEET FOR IOWA

Sunn Hemp (*Crotalaria juncea*) is a quick growing summer annual legume that provides strong nitrogen fixation, lasting residue, and many soil health benefits.



Identifying Features

- » Long, elliptical, simple lancelet leaves
- » Fine downy hairs coating the leaves and stems
- » Extensive taproot

Cultural Traits

- » Summer annual legume
- » Minimum germination soil temperature: 68° F
- » Cold temperature tolerance: 32° F
- » Seeding date: Mid May to Early August*

Planting Information

- » **Drill** at ½ - 1½ inches (10 lbs./acre PLS**)
- » **Broadcast** (15 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:

- » ~15,000 seeds/lb.
- » Plant early in the season for full nitrogen potential.
- » Broadcasting without incorporation is usually less dependable than drilling.
- » For situations suitable for N-fixation, use an inoculant.



Sunn Hemp Seed



Sunn hemp pods



Sunn hemp leaves



Sunn hemp leaves. (Photo by Dinesh Valke)

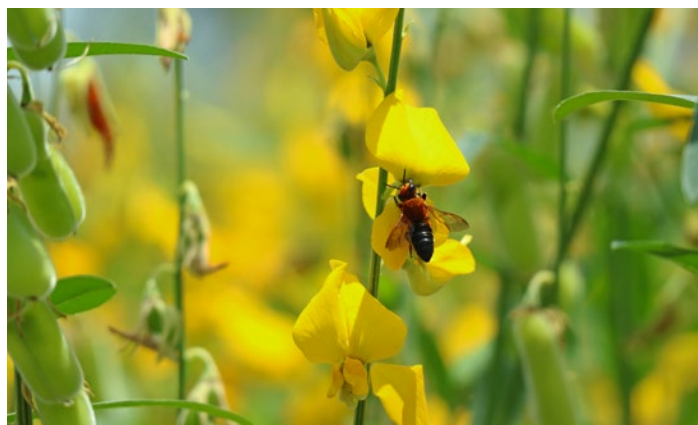
C:N (Carbon:Nitrogen) Ratio

- » Sunn Hemp 14:1 to 30:1

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A sunn hemp field.



Blooming sunn hemp attracts pollinators.

Performance

Dry matter = 1,000 - 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>)	Good
» Cash crop overseed (<i>late seed fill</i>)	Poor
» Grazing quality	Good
» Mechanical forage harvest	Fair
» Nitrogen fixer	Very good
» Nitrogen scavenger	Fair
» Weed suppression	Fair
» Compaction fighter	Fair
» Erosion control	Good
» Lasting residue	Very good
» Quick grower	Very good
» Drought tolerance	Good
» Low fertility tolerance	Fair
» Shade tolerance	Poor

Additional Considerations

- » Mature sunn hemp has fibrous stems that may be difficult to no-till drill into.
- » Sunn hemp is adapted to a wide range of soils and performs better on poor sandy soils than most crops.
- » Sunn hemp is better suited for goat and sheep grazing than for cattle.
- » Avoid grazing after flowering.

Sunn Hemp



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.