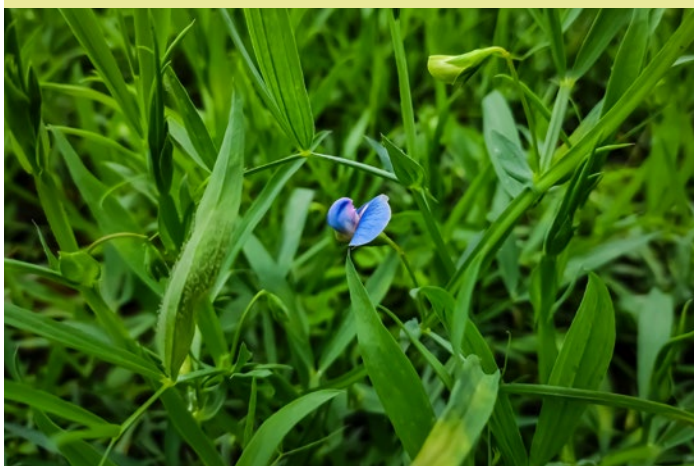


CHICKLING VETCH

COVER CROP FACT SHEET FOR IOWA

Chickling Vetch (*Lathyrus sativus*), also called grass pea, is a winter annual legume that is a good cover crop for nitrogen fixation, weed suppression, erosion control, and fighting compaction.



Identifying Features

- » Compound leaves with typically two leaflets.
- » Alternating leaf appearance along the stem.
- » Non-serrated or lobed leaves.
- » Upper leaflets have modified tendrils.

Cultural Traits

- » Winter annual legume
- » Minimum germination soil temperature: 60° F
- » Cold tolerance temperature: 10° F
- » Seeding date: Late July to Early September* (F)***
- » Seeding date: Early April to Mid May* (S)***

Planting Information*

- » **Drill/Plant** at 1 - 1½ inches (40-60 lbs./acre PLS**)
- » **Broadcast** (50 - 75 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:

- » ~2,500 seeds/lb.
- » Performs best on well-drained soils.
- » It is not recommended to broadcast seed; establishment is best by drill seeding.
- » May not perform well on excessively drained soils in the fall.



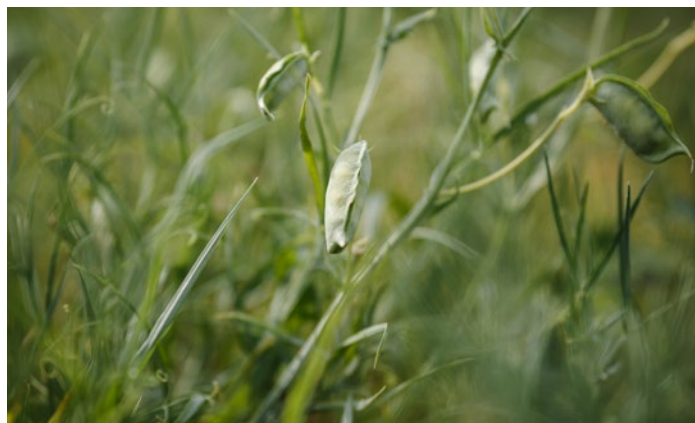
Chickling Vetch Seed



Early Growth Stage



Chickling Vetch leaves.



Chickling vetch forms seed pods after flowering.

C:N (Carbon:Nitrogen) Ratios

- » Chickling Vetch cover crop 10:1

CHICKLING VETCH COVER CROP FACT SHEET



Chickling vetch plant beginning to bloom.



Chickling vetch blooms blue flowers.

Performance

Dry matter = 200 - 2,000 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	Poor
» Mechanical forage harvest	Poor
» Nitrogen fixer	Very good
» Nitrogen scavenger	Fair
» Weed suppression	Good
» Compaction fighter	Good
» Erosion control	Good
» Lasting residue	Fair
» Quick grower	Good
» Drought tolerance	Good
» Low fertility tolerance	Fair
» Shade tolerance	Fair

Chickling Vetch in a cover crop mix



Additional Considerations

- » Toxicity to seeds may occur in livestock, therefore grazing is not recommended until more data is available.
- » Host for soybean cyst nematode, and Penetrans Root-Lesion Nematode.
- » Do not plant in fields where small grains are grown for a cash crop since seed contamination decreases small grain value.

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.