

COMMON VETCH

COVER CROP FACT SHEET FOR IOWA

Common Vetch (*Vicia sativa*) is an annual or biennial cool-season legume cover crop used primarily to fix nitrogen and help fight compaction in the soil.



Identifying Features

- » 4 to 8 pairs of leaflets and a branched tendril at the tip that clasps surrounding vegetation for support.
- » Small stipules at base of leaflet.
- » Stems are angled, branched, ascending or climbing, and hairy.

Cultural Traits

- » Winter annual legume
- » Minimum germination soil temperature: 45° F
- » Cold temperature tolerance: 10° F
- » Seeding date: Late July to Late August* (F)***
- » Seeding date: Early April to Mid May* (S)***

Planting Information

- » **Drill** at ½ - 1 ½ inch (20 lbs./acre PLS**)
- » **Broadcast** (26 lbs./acre PLS)
- » **Aerial** (30 lbs./acre PLS)

*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:

- » ~16,000 seeds/lb.
- » Planting in a mixture can enhance performance as a cover crop.
- » Broadcasting without incorporation is usually less dependable than drilling.
- » For situations suitable for N-fixation, use an inoculant.
- » Slow establishment with vigorous growth after establishment.



Common Vetch Seed



Common vetch seedlings



Close-up of Common vetch



Hairy leaflets on Common vetch

C:N (Carbon:Nitrogen) Ratio

- » Common Vetch 10:1 to 19:1

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Common vetch flowers in a field.



Close-up view of common vetch.

Performance

Dry matter = 500 - 3,000 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	Poor
» Compaction fighter	Good
» Erosion control	Fair
» Lasting residue	Fair
» Quick grower	Good
» Drought tolerance	Fair
» Low fertility tolerance	Fair
» Shade tolerance	Fair

Additional Considerations

- » Can be difficult to terminate with glyphosate.
- » Termination is easier when followed with corn and soybean because of broader herbicide options.
- » Termination is important before seed production.

Common Vetch



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.