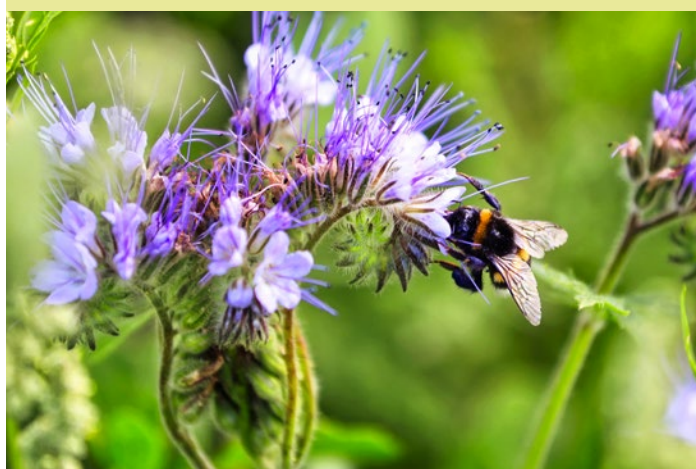


PHACELIA

COVER CROP FACT SHEET FOR IOWA

Phacelia (*Phacelia tanacetifolia*), also called scorpionweed or lacy phacelia, is an annual broadleaf that is a good cover crop selection for scavenging nitrogen, controlling erosion, fighting soil compaction, and providing good pollinator habitat.



Identifying Features

- » Alternating leaves on the stem.
- » Stiff, hairy stems and leaves.
- » Feathery to fern-like leaves.

Cultural Traits

- » Annual broadleaf
- » Minimum germination soil temperature: 37° F
- » Cold tolerance temperature: 18° F
- » Seeding date: Early May to Mid September*

Planting Information*

- » **Drill/Plant** at 1/4-inch (3-5 lbs./acre PLS**)
- » **Broadcast** (4-6 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:

- » ~235,000 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.



Phacelia Seed



Early Growth Stage



Phacelia plant leaves



Young phacelia plants.

C:N (Carbon:Nitrogen) Ratios

- » Phacelia cover crop 10:1 to 15:1

PHACELIA COVER CROP FACT SHEET



Phacelia and yellow mustard in a field.



Phacelia plant in full bloom.

Performance

Dry matter = 200 - 1,000 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 | Fair |
| » Mechanical forage harvest | Poor |
| » Nitrogen fixer | NA |
| » Nitrogen scavenger | Good |
| » Weed suppression | Fair |
| » Compaction fighter | Good |
| » Erosion control | Good |
| » Lasting residue | Fair |
| » Quick grower | Good |
| » Drought tolerance | Very Good |
| » Low fertility tolerance | Poor |
| » Shade tolerance | Fair |

Additional Considerations

- » Aids in potassium availability.
- » Attracts pollinators if left to flower, however, it will not flower if planted late.

Phacelia Plant



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.