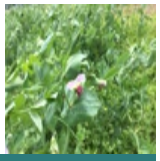
Legume
**Pea, Spring**
Pisum sativum



PLANT HARDINESS ZONE 5 DATASET

## COVER CROP DESCRIPTION

Also known as Yellow Pea or Canadian Spring Pea. Winter-kills if planted in fall. Excellent spring cover crop. Plant early for lush growth; fast-growing varieties are available. Inoculate the seed with appropriate Rhizobium spp.; cross inoculates with vetch. Mixes well with upright cover crop species due to its vining growth habit. Lower biomass and total N fixation compared to overwintered peas and other fall-planted legumes.


Pea, Spring - Brown [2020]


Pea, Spring - Brown [2020]

## GOALS

| | |
|---|---|
| Growing Window | Short |
| Nitrogen Scavenging | |
| Lasting Residue | |
| Prevent Fall Soil Erosion | |
| Prevent Spring Soil Erosion | |
| Forage Harvest Value | |
| Nitrogen Fixation | |
| Penetrates Plow Pan | |
| Reduces Surface Compaction | |
| Improve Soil Organic Matter | |
| Increase Soil Aggregation | |
| Good Grazing | |
| Pollinator Food | |

## WEEDS

| | |
|---|---|
| Residue Suppresses Summer Annual Weeds | |
| Outcompetes Summer Annual Weeds | |
| Suppresses Winter Annual Weeds | |
| Persistence | |
| Volunteer Establishment | |

## ENVIRONMENTAL TOLERANCES

| | |
|---|---|
| Low Fertility | |
| Drought | |
| Heat | |
| Shade | |
| Flood | |
| Salinity | |

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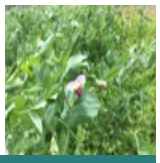

PLANT HARDINESS ZONE 5 DATASET

## Growth Traits

| | |
|---|---|
| Duration | Annual |
| Zone Use | Common |
| Shape And Orientation | Semi-Erect, Climbing |
| Dry Matter (Lbs/A/Yr) | 500 - 2500 |
| Soil Texture | Fine, Medium |
| Soil pH | 6 - 7 |
| Soil Moisture Use | Medium |
| Hessian Fly Free Date? | No |
| Nitrogen Accumulation (Lbs/A/Yr) | 40 - 100 |
| Ease Of Establishment | ■■□□□ |
| Establishes Quickly | ■■□□□ |
| Early Spring Growth | ■■■□□ |
| Flowering Trigger | Plant Size |
| Root Depth | Medium |
| Inoculant Type | Pea/Vetch |

## Soil Drainage

- Very Poorly Drained
- Poorly Drained
- **Somewhat Poorly Drained**
- **Moderately Well Drained**
- **Well Drained**
- Excessively Drained
- Saturated Muck
- **Well Drained Muck**

## Planting

| | |
|---|---|
| Seeds Per Lb | 3500 |
| Seed Price Per Lb | $$$ |
| Base Seeding Rate (Lbs/A) | 50 - 120 |
| Drilled Depth | 1" - 1.5" |
| Can Aerial Seed? | No |
| Can Frost Seed? | No |
| Min Germination Temp (°F) | 42 |

## Termination

| | |
|---|---|
| Tillage At Vegetative | ■■■■□ |
| Tillage At Flowering | ■■■■□ |
| Freezing At Vegetative | ■■■■■ |
| Freezing At Flowering | □□□□□ |
| Chemical At Vegetative | ■■■■■ |
| Chemical At Flowering | ■■■■■ |
| Mow At Flowering | ■■■■■ |
| Roller-Crimp At Flowering | ■■■□□ |

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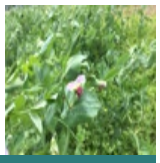
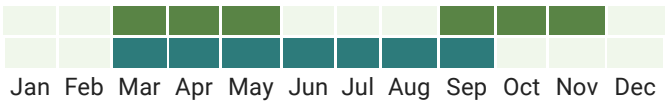


PLANT HARDINESS ZONE 5 DATASET

## Planting and Growth Windows

| | |
|---|---|
| Frost Seeding | N/A |
| Reliable Establishment | 03/01 - 09/30 |
| Temperature/Moisture Risk | N/A |
| Active Growth Period | Fall<br>Spring |
| Winter Survival | Never |
| Can Interseed | N/A |



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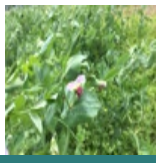

PLANT HARDINESS ZONE 5 DATASET

## Extended Comments

**Taxonomy:** forage pea would be better common name - actual garden peas have been bred for unpigmented seed coats and high sugar, which reduces germination

**Basic Agronomics:** Dry matter highly dependent on planting and termination date and precipitation. Season length, habit vary by cultivar. Biomass breaks down quickly; early planting and termination reduces winter survival. Mixes well with grains when grown for forage. Bloat potential that is easily managed. Seed vigor highly variable. For grazing purposes, restrict to 30% of total ration or mixing with a grass is recommended.

**Planting:** To plant at the lower end of the recommended range consider inclusion of peas with a small grain cover crop like oats as a nurse crop. Germinates best at temperatures around 55 degrees F, so fall germination is often faster than spring germination.

**Termination:** If using herbicides to terminate use a tank mixture (e.g., glyphosate + dicamba or 2,4-d)

**Forage and Grazing:** Good cool season component for grazing mixes.

**Weeds:** Late planting increases heaving. Weak plant with low volunteer seed survivability.

**Disease:** Susceptible to sclerotinia in the East.

**Goals:** Best mixed with cereals to prevent lodging.

**Pollinators:** Self-pollinated so not particularly useful for pollinators compared to other legumes

**Nematodes:** Some cultivars, nematode resistant. Poor host for soybean cyst nematode. Host for root knot nematode, Penetrans Root-Lesion Nematode and sugarbeet cyst nematode.

## References & Resources

**Cover Crops and Green Manures**, University of Vermont Extension
**Using Flowering Cover Crops for Native Pollinating Bee Conservation**, Penn State Extension