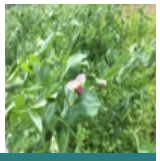
Legume
Pea, Spring
Pisum sativum



PLANT HARDINESS ZONE 7 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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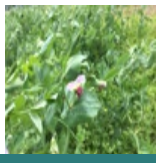

PLANT HARDINESS ZONE 7 DATASET

Growth Traits

Duration	Annual
Zone Use	Emerging
Shape And Orientation	Semi-Erect, Climbing
Dry Matter (Lbs/A/Yr)	1000 - 2500
Soil Texture	Medium, Coarse
Soil pH	6 - 7.5
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)	40 - 100
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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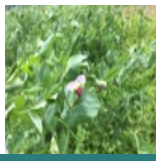
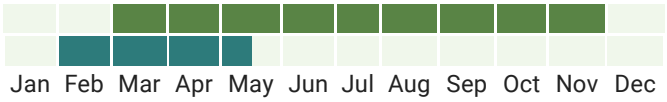


PLANT HARDINESS ZONE 7 DATASET

Planting and Growth Windows

Frost Seeding	N/A
Reliable Establishment	02/15 - 05/15
Temperature/Moisture Risk	N/A
Active Growth Period	Fall, Spring, Summer
Winter Survival	Never
Can Interseed	N/A



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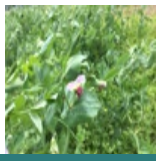

PLANT HARDINESS ZONE 7 DATASET

Extended Comments

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

Goals: Best mixed with cereals to prevent lodging. Less competitive against summer annual weeds in hot-summer areas (such as Contintental hardiness zone 6).

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

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.

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

Insects: Serve as host for BMSB but could be beneficial if used as a trap crop

Disease: Susceptible to sclerotinia in the East.

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

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

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

References & Resources

Fall Cover Crops, University of Delaware Cooperative Extension
Spring Planted Cover Crops for Vegetable Rotations, University of Delaware Cooperative Extension
Using Flowering Cover Crops for Native Pollinating Bee Conservation, Penn State Extension